Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Biennial Regulatory Review – Amendment of	)	
Parts 0, 1, 13, 22, 24, 26, 27, 80, 87,	)	WT Docket No. 98-20
90, 95, 97, and 101 of the Commissions Rules	)	
to Facilitate the Development and Use of the	)	
Universal Licensing System in the Wireless	)	
Telecommunications Services	)	

NOTICE OF PROPOSED RULEMAKING

Comment Date: May 22, 1998

To: The Commission

COMMENTS OF

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INTRODUCTION

My family and I have been GMRS operators since 1993. I am also representing a group of families and friends that cooperatively operate several suburban repeater systems 30 miles east of San Francisco, California.

We fully support the intent of the ULS and the Commissions effort to streamline and simplify GMRS licensing procedures. However, the proposed changes go much further than simply streamlining. We feel some changes will fundamentally change the nature of the service from a family-based mobile service to one that approximates Class D Citizens Band.

Today, we rely on the good will of licensees to cooperate and shared channels. In our area, this has generally been successful. However, as most repeater operators will confess, we spend a great deal of time tracking down interference to keep our systems useable, even under the current rules. As the burden of determining the interfering source has generally fallen on the affected licensee, we are concerned that implementation of certain portions of NPRM 98-20 may create additional interference problems, while simultaneously eliminating our chances of resolving them. Further more, in those cases where the "interfering source" does not wish to cooperate, operational rules must exist to give the Commission enforcement authority.

Therefore, our comments emphasize the impact proposed rule changes will have on the potential for interference.

COMMENTS

95.29 (a) (3): We strongly urge the Commission to retain the restriction (as written) on direct communications on the 467 MHz channels. Such operation will likely cause significant interference to repeater users on the 467 MHz channels.

As one would expect, users operating directly on 467 MHz would not always be aware of other co-channel stations operating through a repeater unless they are relatively close to these other stations. However, the repeater will detect both stations (since repeaters are normally placed on high ground), and interference will result.

Repeater users could also cause interference to (proposed) 467 MHz direct users since the repeater user's radios do not routinely monitor the 467 MHz side of each repeater pair.

In fact, neither the current nor the proposed rules would protect repeater users (or 467 MHz users) from this type of interference. The current pre-transmission monitoring rule (95.175 {a}) would be difficult or impossible to apply under these conditions.

It is also possible that many direct communications on the 467 MHz channels would employ CTCSS/DCS that could inadvertently activate co-channel repeaters causing additional interference to 462 MHz direct users.

Such "repeater-input" operation in other similar mobile and dispatch-oriented services such as Part 90 still restrict or discourage such operation for this reason.

Although much of the interference discussed above would be unintentional, the fact remains that use of the 467 MHz channels for direct and repeater communications are incompatible.

95.29 (b): We support all-channel operation for mobile station operation, but suggest no change in base station channels. Furthermore, these new privileges should only be applicable to individuals, not grandfathered commercial and industrial licensees.

It is not uncommon that mobile licensees travel outside the coverage area of their existing repeater system and need to access another system, but cannot find one (or reach agreement with an existing repeater owner) on their two licensed pairs.

This will encourage shared use of existing systems and will likely reduce the total number of applications for new repeater systems since individuals would not need to build and license additional systems on their existing channel pairs to ensure coverage.

For mobile operation, we suggest the following text:

"The FCC will normally assign only one channel or channel pair for mobile station operation. Up to seven additional channels or channel pairs will be assigned at the request of the applicant."

All-channel base station operation would NOT enhance or improve GMRS operations to any great extent, but would degrade the service by encouraging undesirable use.

All-channel base station operation would encourage non-family communications as licensees would "seek-out' other non-family mobile and base stations to communicate with. Long-distance or "DX-type" communications would become more common. There are other services more appropriate for such communications.

All-channel base station operation would have a negative impact on existing base stations as well. As many of these stations are at high-elevations, they can receive co-channel traffic over a wide area. Itinerant base stations would cause unexpected and unpredictable receiver interference and blocking and degrade the quality of the service. Today, GMRS operators select the quietest channels on which to build, and this provides reliable and generally predictable service quality to all other local GMRS users, and promotes an even distribution and loading of GMRS channels.

For base station operation, we suggest the following:

"The FCC will normally assign only one channel for base station operation. One additional channel will be assigned at the request of the applicant.

We support all-channel operation for small base stations. It permits flexibility when one operates away from their home area, such as at work or at another's home. It is unlikely such operation will cause significant interference or other problems. For small base station operation, we suggest the following:

"The FCC will normally assign only one channel for small base station operation. Up to seven additional channels will be assigned at the request of the applicant."

Another drawback to this proposal is that filing requirements have been waved. New and existing licensees could begin operating on additional channels without applying for, or modifying their licenses. This has numerous drawbacks.

It does not preclude "grandfathered" commmercial licensees from such operation. It is well known that commercial use is incompatible with individual or family communications.

This proposal will eliminate the opportunity to coordinate co-channel repeater and base station operation to avoid interference, and reduce our chances of determining possible sources of interference once they occur. Lastly, it will also limit the ability of licensees to

locate a nearby repeater and its owner to arrange for shared operation. This will result in additional repeater systems and more sources of interference.

We strongly suggest that the Commission continue to collect all currently required technical information for repeater and base station operation, at a minimum. We also suggest that non-individual licensees be restricted to their currently assigned channels.

Thus, existing licensees would follow the current license modification procedure already in place to add additional channels to their licenses, and new individual licensees would specify each frequency and station class desired.

We understand the Commissions need to reduce the license-processing burden. To reduce the number of license modifications received at one time, consider allowing modifications at no cost during the normal license renewal period, while maintaining the charges for normal modifications any other time.

95.29 (c): This Section should be retained. Even though we operate repeaters, we believe that the proposed deletion of this section this will lead to a proliferation of unnecessary repeater systems and non-directional control station use, thereby creating additional interfering sources.

The leading cause of interference in our suburban area is from other repeater systems that are set up solely to serve other users through a purported "cost-sharing" arrangement. In

many cases, faulty or obsolete repeater equipment is employed and/or is configured in a manner to "warehouse" a channel by "tone-hogging" to reserve space for future users. We inadvertently activate these systems on a regular basis, which causes interference to our local operations. Because these owners are "non-resident", they are normally unaware of these problems. Only with the use of the FCC database are we able to contact them. All-channel repeater operation will promote more of the same operations and create more interfering sources.

GMRS systems were meant to be limited to one or two LOCAL repeater systems and associated control stations. Control stations could then employ directional antennas and low power since they normally accessed only local systems. This minimized interference to other co-channel repeaters in other systems, and lead to dependable and reliable service. All-channel control station operation would encourage use of other repeaters in different areas at the expense of increased interference to local systems. This Section should be retained but clarified. We suggest the following:

"The FCC will normally assign only one channel pair for repeater and control station operation in a GMRS system. A second channel pair will be assigned at the request of the applicant."

95.47 (a): This Section must be retained. Restricting fixed stations in large urban areas will maximize channel capacity for GMRS users, and maintain the "mobile" nature of the

GMRS. We see no need for fixed station operation in this service. Leased wireline services would be more appropriate for this type of use.

95.47 (b): Control station use can be problematic to repeater operations on shared channels such as the GMRS and some restrictions must be retained. However, when repeater interference is unlikely to occur, the rule should allow some flexibility. We suggest employing the same ERP restrictions that now apply to small control stations under 95.135(c), but also allow for a "control station power test" showing using the method currently defined in Appendix A. We suggest the following:

"All control stations within a large urban area must have:

(1) A directional antenna (at lease 15 decibel front-to-back ratio); and

(2) Transmitter power no greater than 5 W ERPd.

The Commission will allow a higher ERPd if it can be shown that:

(1) Such use will not cause destructive interference to other co-channel systems; and

(2) The proposed ERPd is no greater than that determined through a Control Station Power Test (see Appendix A)."

We feel that that most if not nearly all, small control stations could still adequately access the intended mobile relay stations (repeaters) while complying with these antenna gain and ERP limitations.

We have used the term "ERPd" to indicate a reference to a dipole antenna. This is the proper industry-accepted term for antenna gain and does not change the original intent of the rule.

95.53/95.55/95.57/95.59: These sections should not be eliminated as they have served the GMRS community well. However, this section could be simplified by changing the emphasis.

The current section dictated BOTH permissible and non-permissible communications. This resulted in an unnecessarily complex set of rules. Such complications discouraged individuals from licensing in the service, created a burden for the Commission, and stifled innovation by manufacturers to produce useful and affordable GMRS products. We therefore suggest that emphasizing restricted operations instead of permissible operations can attain a good balance. The result will be more interest by individuals and manufacturers, while still providing a basis for enforcing interference problems. In general, we suggest the following simplification:

"Station Communication Points:

(1) Mobile and control stations must not activate a repeater in another GMRS system unless written permission is obtained from the licensee of that system;

(2) Base stations must not communicate with any another base station, or transmit communications to paging receivers outside if its GMRS system;

(3) Repeater stations must not retransmit communications between any two land stations, or communications from mobile or control stations of another GMRS system not licensed to an individual;

(4) Control stations must not communicate with any other control station or base station directly."

We feel other current rule sections are sufficient to restrict other types of communications not specifically noted here.

95.75: The Commission must continue to collect this information for all repeater and base stations at a minimum. However, we favor some simplification of licensing procedures for mobile, small base station and small control stations operation.

GMRS repeater and base stations are the most likely station class to cause interference due to their height and power. As a rule, they are routinely co-located with stations in the commercial and public-safety services. Eliminating collection efforts for repeater and base station information would severely limit GMRS and well as commercial and public safety users from locating and identifying interfering sources.

The current user-based method of frequency/channel coordination for repeater systems also relies in part on information contained in the current licensing database.

Licensees also locate repeater operators to arrange for shared use of systems using the FCC database. If a licensee cannot determine the system's operator, they will be more likely to build their own system, creating more interfering sources, or not get the full benefit of the GMRS service.

95.121: This section must be retained to allow licensees locate and resolve interference problems as noted in our comments to 95.75. At a minimum, FB2, FB and FX1 station classes must be listed on the license since these are the most likely interference sources.

95.129 (c) (1): This Section must be retained to reduce the potential for interference. See our comments to 95.47(b).

95.135 (b): This Section must be retained to reduce the potential for interference. Since GMRS is an informally coordinated service, such rules are required.

95.173 (b) (3): This Section must be retained to reduce the potential of interference.

95.175: We strongly recommend that this section be retained. Especially important is the explicit requirement for pre-transmission monitoring (Section [a]) and waiting (Section [b]). If GMRS channels were provided exclusivity in a particular area, pre-transmission

monitoring would not be required. However, the GMRS is based on shared-channel operations and must rely on such use rules.

Appendix A: This Section should be retained. This is the most practical method of reducing interference potential in an informally coordinated service such as the GMRS. This does not create a burden on the Commission by retaining it, but it allows enforcement of interference problems when required.

END

Respectfully submitted,

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